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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,295	09/29/2003	Edward George Butt	TUC920030159US1	4092

EXAMINER	
MASKULINSKI, MICHAEL C	

ART UNIT	PAPER NUMBER
2113	

MAIL DATE	DELIVERY MODE
09/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,295

Applicant(s)

BUTT ET AL.

Examiner

Michael C. Maskulinski

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-18 is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☒ Claim(s) 3,4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Second Non-Final Office Action

1. The indicated allowability of claim 2 is withdrawn in view of the newly discovered reference(s) to Rao et al., US 2004/0250245 A1. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. In view of the recent amendments, the rejection of claims 1-19, under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps, has been withdrawn..

3. In view of the recent amendments, the rejection of claims 1-19, under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brannock et al., US 2003/0066062 A1, and further in view of Rao et al., US 2004/0250245 A1.

Referring to claim 2:

a. In paragraph 0049, Brannock et al. disclose updating a firmware file system. However, Brannock et al. don't explicitly disclose running an automated LIC dispatcher process that retrieves a state action from a state action table and executes said state action. In paragraph 0118, Rao et al. disclose that the update agent may be adapted to incorporate the retrieved extension functions and accompanying code into an update agent function table. It would have been obvious to one of ordinary skill at the time of the invention to include the update agent function table of Rao et al. into the system of Brannock et al. A person of ordinary skill in the art would have been motivated to make the modification because a table provides a simple way to organize functions and makes it easier to add additional functions (see Rao et al.: paragraph 0109).

b. In paragraph 0049, Brannock et al. disclose full recovery in the event of an anomaly during update, such as a power failure (determining if said state action has executed with at least one error and in response to determining that said state action has executed with at least one error, entering an error recovery procedure).

c. In paragraph 0049, Brannock et al. disclose that as the update is performed, the state bits in the state field are changed (in response to determining that said state action has not executed with at least one error, retrieving a next state action).

d. In paragraph 0041, Brannock et al. disclose that upon validation of the new file as indicated by file data valid state, the original file, which has been

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marked for update, becomes invalid (determining if said next state is a last state action; in response to determining that said next state action is not a last state action, returning to executing step; and in response to determining that said next state action is a last state action, ending said storage controller LIC update process).

Allowable Subject Matter

6. Claims 3, 4, 6, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Claims 8-18 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter.

Referring to claims 8 and 14, the prior art does not teach or reasonably suggest in a system with a storage controller comprising a first cluster, a second cluster, a communication line between said first and second cluster, and a state action table, wherein said state action table comprises a plurality of individual state actions for an automated LIC update with error recovery, in response to determining that said state action has executed with at least one error, entering an error recovery procedure.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael C Maskulinski
Primary Examiner
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